



November 21, 2008

HARBOR/MARINA DIVISION

Chris Harrold, Chairman
Research Advisory Panel
Monterey Bay National Marine Sanctuary
299 Foam Street
Monterey, CA 93940

Dear Chris,

I'm writing to request ten minutes of time on the January 2009 Research Advisory Panel agenda to make a request to the RAP from the City of Monterey. Specifically, I wish to request that the RAP provide individual, and a collective opinion, as to the need for any new, reconfigured, or more restrictive marine protected areas within the federal waters of the Monterey Bay National Marine Sanctuary for currently unmet research needs. I will ask the RAP to evaluate this need relative to the Statement of Need that the Monterey Sanctuary has created and which is attached. I will also ask them to evaluate this relative to the research opportunities provided by the State MPAs that currently exist within this region, and including the Davidson Seamount, the Essential Fish Habitat areas, and the Rockfish Conservation Area. I'm making this request from the City of Monterey because the City has gone on record stating the Sanctuary should make resource management decisions based on the best scientific advice possible.

Thank you for your consideration of this request.

Sincerely,

Stephen B. Scheiblaue
Harbormaster

Enc.

C: Paul Michel, MBNMS
Chuck Della Sala, Mayor
Monterey City Council
Don Hansen, PFMC

2.3 Designation of research areas to differentiate between natural variation versus human impacts to ecological processes and components

Section 301(b)(5) of the NMSA addresses the importance of research by stating "support, promote, and coordinate scientific research on, and long-term monitoring of, the resources of these marine areas." Developing an understanding of the interactions and interdependence of living marine resources in a natural environment is key to effective management. As with the protection of any natural resource, information on the status and natural variability of resource components, species, and interactions is essential for the informed management of an area as extensive as the Sanctuary. In order to adequately differentiate between anthropogenic and natural changes and to further determine how those changes might affect other components of the ecosystem, a baseline set of ecosystem measurements should be established and monitored over subsequent years. As these data are gathered and analyzed, scientists and managers can determine with greater confidence how much variability is natural in a system and how much may be the result of anthropogenic influence. With a better understanding of the factors that influence ecosystem components, managers can support both improved protection of the resource and a more rapid and appropriate response to natural and/or human-induced perturbations.

Control areas, places where extractive or disruptive anthropogenic activities are minimized, are critical for the MBNMS in order to determine the responses of key resources to human influence. By comparing changes in key resources in a control area to other areas of the Sanctuary, MBNMS management would have better information to address the needs of research, protection, and constituent use of the resources.

The research conducted in MPAs could be done in partnership with, or individually by, other managing agencies (e.g., NOAA Fisheries, PFMC, and the State of California), academic institutions, the fishing community, and conservation groups. The type of questions that can be addressed by establishing MPAs for research purposes include, but are not limited to, the following:

- What variability is inherent in the natural ecosystem components and what changes may be the result of human influence?
- What are the effects of extractive activities on ecosystem components?
- How would benthic communities change in response to a further reduction in human activity?
- What are the recovery trajectories in disturbed habitats?
- Where along the continuum of community structure does the protected area fall compared to unprotected or heavily used areas?
- What is the functional role of deep-sea biogenic habitats, such as deepwater corals, sponges, and chemosynthetic biological communities in regulating community structure?

In addition, the Marine Life Protection Act was intended, in part, to help the State of California understand the nearshore marine environment by providing the opportunity to study areas that are not directly impacted by human activities. Having similar research areas in federal waters, where results can be compared to those found in state waters, is not only critical to effective management of the Sanctuary, but is also key to effective ecosystem-based management.